

REMARKS / DISCUSSION OF ISSUES

Claims 1-5 are pending in the application. Claims 6-9 are cancelled without prejudice or disclaimer of their subject matter.

Objection to the Specification

The amendments to the Abstract are believed to overcome the objections thereto.

Rejections under 35 U.S.C. § 103

Claims 1-4 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Murthy, et al.* (US Patent 6,101,238) and *Entrekin, et al.* (WO 01/69282). For at least the reasons that follow, Applicants respectfully submit that a *prima facie* case of obviousness has not been established and thus claims 1-4 are patentable over the applied art.

As stated in MPEP § 2143, in order to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

In addition, Applicants rely at least on the following standard of law as it relates to obviousness. Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or nonobviousness of the subject matter is determined. In *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727; 82 U.S.P.Q.2D 1385 (2007), citing, in part *Graham v. John Deere Co.*, 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), the Court held: “A factfinder should be aware, of course, of the distortion caused by hindsight bias and must

be cautious of arguments reliant upon *ex post* reasoning. See *Graham*, 383 U.S., at 36, 86 S. Ct. 684, 15 L. Ed. 2d 545 (warning against a "temptation to read into the prior art the teachings of the invention in issue" and instructing courts to "guard against slipping into the use of hindsight" (quoting *Monroe Auto Equipment Co. v. Heckethorn Mfg. & Supply Co.*, 332 F.2d 406, 412 (CA6 1964)))." Moreover, if there is no suggestion to combine the teachings of the applied art, other than the use of Applicants' invention as a template for its own reconstruction, a rejection for obviousness is improper. *Ex parte Crawford, et al.* Appeal 20062429, May 30, 2007.

Claim 1 recites:

A method for combining ultrasonic images of the same object including the steps of:

- seeking contours representing an interface on the ultrasonic images to be combined, said search step being intended to define interest areas close to said representative contours,

- analyzing interest areas, said analysis step being intended to allocate weights to the points in said interest areas and to the points corresponding to said interest areas on the various ultrasonic images,

- constructing a combination image, a point on the combination image corresponding to a point on at least one interest area being obtained from a weighting of the corresponding points on the ultrasonic images to be combined according to the weights allocated in said analysis step.

a. Combination of references is improper

The Examiner relies on the teachings of *Murthy, et al.* for the alleged disclosure of most of the features of claim 1, conceding that the reference does not disclose ultrasound image processing. In fact, the reference is solely concerned with processing x-ray images and there is no teaching, suggestion or even mention of the application of the teachings of *Murthy, et al.* to any other imaging technology (e.g., NMR, MRI, PET)

and especially application of its teachings to ultrasonic imaging. Respectfully, as noted in *Ex parte Crawford, et al.* without the suggestion to combine the teachings except for the use of Applicants' claims as a template for their reconstruction, a rejection for obviousness is improper. Applicants respectfully submit that but for the use of their claims as a guide to rejection, there would be no basis for combining the teachings of *Murthy, et al.* with *Entrekin, et al.* Rather, Applicants proffer that the total and complete silence on the applicability of the teachings of *Murthy, et al.* to any other imaging technology may suggest that for reasons undisclosed in the reference, the teachings are not usefully applied to other than x-ray imaging. As such, Applicants respectfully submit that the combination of references is improper and the rejection is flawed as a result.

b. *Murthy, et al.* fails to disclose at least one feature of claim 1

As noted above, claim 1 features:

"...seeking contours representing an interface on the ultrasonic images to be combined, said search step being intended to define interest areas close to said representative contours..."

The Office Action directs Applicants to columns 4 and 5 in nearly their entirety; and column 7, lines 8-18 of *Murthy, et al.* for the alleged disclosures of the features noted immediately above. Applicants have reviewed the noted portions of the applied art and respectfully submit that there is no disclosure or suggestion of seeking contours of an interface on ultrasonic images. Specifically, column 4 describes the function of an automatic background detector 110; and the detection and elimination of background regions during compound image generation. Column 5 describes a collimation detection filter and its function. Finally, the cited lines of column 7 relate to alignment of two images and the elimination of background imagery prior to alignment. However, nowhere in the approximately 120 lines of *Murthy, et al.* relied upon for the alleged disclosure of the captioned features of claim 1 is there a mention, yet alone a complete

description, of the seeking contours representing an interface on ultrasound images to be combined and the defining of areas close to the representative contours.

c. Rejection is improper

For at least the reasons set forth above, Applicants submit that the rejection is flawed as because the combination of references is improper; and because the applied art fails to disclose at least one feature of claim 1. Thus, claim 1 is patentable over the applied art. Moreover, claims 2-4, which depend from claim 1, are also patentable for at least the same reasons and in view of their additionally recited subject matter.

Conclusion

In view the foregoing, applicant(s) respectfully request(s) that the Examiner withdraw the objection(s) and/or rejection(s) of record, allow all the pending claims, and find the application in condition for allowance.

If any points remain in issue that may best be resolved through a personal or telephonic interview, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

Respectfully submitted on behalf of:
Phillips Electronics North America Corp.

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